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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,185	10/19/2001	Haiyun Yang	6024-008	9074
32566	7590	09/28/2005	EXAMINER	
PATENT LAW GROUP LLP 2635 NORTH FIRST STREET SUITE 223 SAN JOSE, CA 95134			DAVIS, CYNTHIA L	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

Office Action Summary	Application No.	Applicant(s)	
	10/040,185	YANG, HAIYUN	
	Examiner	Art Unit	
	Cynthia L. Davis	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-8 and 10-16 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 1 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This application is in condition for allowance except for the following formal matters:

Claim Objections

1. Claim 1 is objected to because of the following informalities: in line 1, "method for determining number of a frame" should be changed to "method for determining a number of a frame". Appropriate correction is required.
2. Claim 9 is objected to because of the following informalities: in line 1, "system for determining number of a frame" should be changed to "system for determining a number of a frame". Appropriate correction is required.

Allowable Subject Matter

3. Claims 2-8 and 10-16 are allowed.
4. The following is a statement of reasons for the indication of allowable subject matter:

In claim 1, the limitation

receiving a sequence of at least $M+1$ consecutive OFDM frames, each frame having an index m , having a designated preamble and having a selected length $N1$ and an associated pseudo-noise signal $PN(t;m)$ ($m = 0, \dots, M; M \geq 1$); providing an overlap function $OF(m;k)$ of the designated preambles with each of a sequence of selected reference signals, indexed by $k = 1, 2, \dots, K$ where K is a selected integer, and determining a phase $\Phi(m)$ corresponding to a location of a maximum amplitude of the overlap functions $OF(m;k)$ for each of the $M+1$ designated preambles; forming a selected M th order phase difference of the

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phases $\Phi(m)$; and comparing the Mth order difference with a selected table of Mth order phase differences to determine a frame number of at least one of the M+1 frames.

is not found in the prior art.

In claim 9, the limitation

to receive a sequence of at least M+1 consecutive OFDM frames, each frame having an index m, having a designated preamble and having a selected length N1 and an associated pseudo-noise signal $PN(t;m)$ ($m = 0, \dots, M; M \geq 1$); to provide an overlap function $OF(m;k)$ of the designated preambles with each of a sequence of selected reference signals, indexed by $k = 1, 2, \dots, K$ where K is a selected integer, and determining a phase $\Phi(m)$ corresponding to a location of a maximum amplitude of the overlap functions $OF(m;k)$ for each of the M+1 designated preambles; to form a selected Mth order phase difference of the phases $\Phi(m)$; and to compare the Mth order difference with a selected table of Mth order phase differences to determine a frame number of at least one of the M+1 frames.

is not found in the prior art.

Conclusion

5. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L. Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600